



Creating an Animated Lotus Flower

1. Copy and Paste the 600x400 grid from:
`http://steamcoded.org/lessons/grid600x400.svg.txt`
2. Add a `<path>` element with attributes:
`d="M300,300q-120,-140,0,-300q120,160,0,300"`
`style="fill:red;stroke:blue;"`
3. Append the following path command to the `d` attribute of step 2
`q-90,-140,0,-260q90,120,0,260"`
4. Change the style attribute of the path element to be:
`style="fill:red;fill-rule:evenodd;"`
5. Make the path element a reusable symbol by adding `<defs>` and `<symbol>` elements around the path element. Give the `<symbol>` element `id="petal"`
6. Outside the `<defs>` element, add a `<rect>` element with attributes:
`width="100%" height="100%" style="fill:black;"`
7. On the next line, add a `<use>` element with attributes:
`xlink:href="#petal"`
`transform="rotate(-90,300,300)"`
`style="fill:red;"`
8. Copy the `<use>` element of step 7 and paste on the next line, then change the rotation degrees from `-90` to `90`
9. Paste the code again on the next line, then change the rotation degrees from `-90` to `-70` and the style attribute to `fill:orange;`
10. Copy the `<use>` element of step 9 and paste on the next line, then change the rotation degrees from `-70` to `70`
11. Paste the code again on the next line, then change the rotation degrees from `-70` to `-50` and the style attribute to `fill:yellow;`
12. Copy the `<use>` element of step 11 and paste on the next line, then change the rotation degrees from `-50` to `50`
13. Paste the code again on the next line, then change the rotation degrees from `-50` to `-30` and the style attribute to `fill:lime;`
14. Copy the `<use>` element of step 13 and paste on the next line, then change the rotation degrees from `-30` to `30`
15. Paste the code again on the next line, then change the rotation degrees from `-30` to `-10` and the style attribute to `fill:purple;`
16. Copy the `<use>` element of step 15 and paste on the next line, then change the rotation degrees from `-10` to `10`
17. Give the first `<use>` element a child element `<animateTransform>` with attributes:
`attributeName="transform" attributeType="XML" type="rotate"`
`values="0,300,300;-90,300,300;0,300,300;" dur="16s" repeatCount="indefinite"`

Note: Need to change the ending `</>` to `>` on the use element, then add a ending `</use>` element after the `<animateTransform>` element
18. Repeat step 17 for the second `<use>` element. Copy the `<animateTransform>` element and paste it after the second `<use>` element, then change the values attribute second value from `-90,300,300` to `90,300,300`
19. Continue adding the `<animateTransform>` element to all the `<use>` elements, then change the values attribute second value changing the rotation degrees each time to `-70`, then `70`, then `-50`, then `50`, then `-30`, then `30`, then `-10`, then `10` until add `<use>` elements are animated.